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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/038,164 | 01/02/2002 | Casey R. Winkel | 42390P13383 | 7816 |

8791 7590 02/20/2004

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LOS ANGELES, CA 90025

EXAMINER

SCHEUERMANN, DAVID W

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

2834

DATE MAILED: 02/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/038,164

Applicant(s)

WINKEL ET AL.

Examiner

David W. Scheuermann

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 and 24-29 is/are pending in the application.
- 4a) Of the above claim(s) 14-23 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 11-13, 24-27 and 29 is/are rejected.
- 7) ☒ Claim(s) 7-10 and 28 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

RCE Approved

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114; and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on November 24, 2003 has been entered.

Response to Amendment

Applicant's arguments with respect to claims 1 and 24 have been considered but are moot in view of the new ground(s) of rejection. Applicant asserts that Rosales does not teach suggest or disclose that the bearings in the bearing sets share a common rotating sleeve. Rosales figure 1 shows common rotating sleeve 15 between bearing sets 24 and 25.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hommel, US 6208923 in view of Rosales, US 3737202. Hommel discloses a redundant motor system comprising motor 14a and 14b coupled to shaft 17 and a plurality of motor controllers 12a and 12b coupled to the motors wherein the failure of any motor or controller does not cause the overall apparatus to fail. Hommel does not expressly disclose redundant bearings. Rosales discloses redundant bearings, for the purpose of preventing catastrophic failure. At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use redundant bearings on the motor shaft of Hommel. One of ordinary skill in the art would have been motivated to do this to prevent catastrophic bearing failure.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Hommel and Rosales as applied to claim 1 above, and further in view of Richmond, US 5315954. The combination of Hommel and Rosales as applied to claim 1 above discloses the invention as claimed except for the bearing failure detector. Richmond discloses a bearing alarm, for the purpose of indicating when the bearing has exceeded a predetermined temperature. At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use a bearing alarm in the combination of Hommel and Rosales as applied to claim 1 above. One of ordinary skill in the art would have been motivated to do this to notify the user that the bearing has exceeded a predetermined temperature.

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Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Hommel and Rosales as applied to claim 1 above, and further in view of Grieb, US 3959677. The combination of Hommel and Rosales as applied to claim 1 above discloses the invention as claimed except for the fan blade, housing and heat sink coupled to the housing. Grieb discloses a fan and cooperating heat sink attached to a housing for the purpose of ensuring adequate cooling at critical areas, note column 1, lines 45-46. At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to enclose the motors of the combination of Hommel and Rosales as applied to claim 1 above in a housing and include a fan and heat sink. One of ordinary skill in the art would have been motivated to do this ensure adequate cooling at critical areas.

Claims 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Hommel and Rosales as applied to claim 1 above, and further in view of Harmsen et al., US 5267842. The combination of Hommel and Rosales as applied to claim 1 above discloses the invention as claimed except for the bifilar windings and parallel connected pads. Harmsen et al. discloses the use of bifilar windings for the purpose of permitting the use of smaller capacitors, note column 4, lines 59-64. At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use bifilar windings in the combination of Hommel and Rosales as applied to claim 1. One of ordinary skill in the art would have been motivated to do this to enable the use of smaller capacitors.

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Claims 24-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Hommel and Rosales and Grieb as applied to claim 3. The combination of Hommel and Rosales and Grieb as applied to claim 3 disclosed the invention as claimed except for the bearing failure alarm. Richmond discloses a bearing alarm, for the purpose of indicating when the bearing has exceeded a predetermined temperature. At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use a bearing alarm in the combination of Hommel and Rosales and Grieb as applied to claim 3 above. One of ordinary skill in the art would have been motivated to do this to notify the user that the bearing has exceeded a predetermined temperature.

Re claim 25, is it inherent that both motors rotate in the same direction. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Hommel, Rosales, Grieb and Richmond as applied to claim 24 above. The combination of Hommel, Rosales, Grieb and Richmond as applied to claim 24 above, discloses the invention as claimed except for the bifilar winding. Harmsen et al. discloses the use of bifilar windings for the purpose of permitting the use of smaller capacitors, note column 4, lines 59-64. At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use bifilar windings in the combination of Hommel, Rosales, Grieb and Richmond as applied to claim 24. One of ordinary skill in the art would have been motivated to do this to enable the use of smaller capacitors.

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Allowable Subject Matter

Claims 7-10 and 28 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims and to eliminate any 112 rejections.

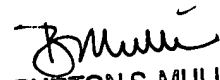
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David W. Scheuermann whose telephone number is (571) 272-2035. The examiner can normally be reached on Monday through Friday from 8:00 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on (571) 272-2034. The fax phone numbers for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-1562.

dws
February 11, 2004


BURTON S. MULLINS
PRIMARY EXAMINER